Brant.—At Oldham Pond the records for five years show the occurrence of Brant only four times. 1905—1 in pond, flock of 30 flying. 1907—1 in pond. 1909—flock of 18 in pond. This shows clearly the preference of the Brant for the longer and more easterly route outside Cape Cod.

SUMMER AND FALL BIRDS OF THE HAMLIN LAKE REGION, MASON COUNTY, MICH.

BY RALPH WORKS CHANEY.

THE records upon which the following list of birds is based were taken in the Hamlin Lake Region, in Western Mason County, Michigan, during a period extending from June 20 to September 27, 1909.

The main portion of Hamlin Lake is some seven miles long and opens into Lake Michigan on the west through a channel less than a mile in length. Entering Big Hamlin from the northeast is Upper Hamlin Lake, which is less than half as long as the larger lake, and only half a mile across at its widest point. Into Upper Hamlin from the east flows the Sable River, at the mouth of which are large marshes, which I did not explore. Many small streams, usually heavily wooded, flow into Upper Hamlin, widening at their mouths into swampy "bayous" bristling with tall stumps and snags. Woods rise up on all sides of the lake, especially on the north, in which direction they extend for many miles. Formerly a lumbering country, this region now contains but few white pines, most of the timber being hardwood, beech, maple, oak and birch. Hemlock also is commonly scattered through the beech woods, and along the creeks arbor vitæ is the most abundant form. Parallel with Lake Michigan, numerous sand ridges extend toward the north, the tops of which are covered with oak and hemlock. The little valleys between these ridges are almost jungles, from their profusion of saplings, ferns, blackberry bushes, and other underbrush. Near Lake Michigan are extensive dunes, bare except for a covering of wild grape-vines and a few seattered trees. A mile back in the woods from Upper Hamlin lies Nordhouse Lake, which shrinks to a small pond by the end of the summer, but furnishes a good feeding place for ducks and shore birds. On the east and to some extent on the south of Upper Hamlin are extensive farms and orchards, about which many common birds were seen.

This region appears to be the southern breeding limit of a number of the more northern species. In Oceana County, near Little Point Sable, less than thirty miles south, such birds as the Yellow-bellied Sapsucker, Junco and Winter Wren are not commonly seen during the summer. These species and other northern breeding birds were seen about Hamlin Lake all summer, though not in large numbers.

Several short trips were taken into Oceana County, in the vicinity of Silver Lake, where I saw a number of ducks and shorebirds not observed in Mason County.

1. **Colymbus auritus.** Horned Grebe.— This species was not observed during the summer, and was seen only once on Upper Hamlin, Sept. 16. A specimen was taken at Silver Lake, in Oceana Co., on Sept. 23.

2. Podilymbus podiceps. Pied-billed Grebe.—During the latter part of the summer this grebe could be seen daily in small flocks on Nordhouse Lake.

3. Gavia immer. Loon.— One was seen Sept. 21 on Lake Michigan.

4. Larus argentatus. Herring Gull.—Although common around the harbor at Ludington during the summer, I saw no evidence of breeding. Migrants from the north came down early in September.

5. Larus delawarensis. RING-BILLED GULL. — Common along Lake

Michigan during September.

6. Larus philadelphia. Bonaparte's Gull.— Large flocks were seen

on Upper Hamlin early in September.

7. Lophodytes cucullatus. Hooded Merganser.— An immature female was secured from a flock of three, all in immature plumage, at Nordhouse Lake on Sept. 11.

8. Anas platyrhynchos. Mallard.—Several females were seen at

Silver Lake on Sept. 23.

9. Anas rubripes. Black Duck.—While hunting on Silver Lake on Sept. 23, I secured two females from a flock of about ten. When alarmed the birds rose in almost perpendicular spirals which soon carried them out of range.

10. Querquedula discors. Blue-winged Teal.— Fairly common. A

specimen was taken at Silver Lake on Sept. 23.

- 11. Marila americana. Redhead.— A flock of four Redheads was seen on Upper Hamlin on Sept. 26.
- 12. Marila affinis. Lesser Scaup Duck.—Several pairs were breeding in the "bayous" on the north side of Upper Hamlin. On July 1 I saw a flock of young birds barely able to fly.
- 13. Botaurus lentiginosus. American Bittern.— Common in swampy territory, but seldom seen about Hamlin Lake.
- 14. Ardea herodias. Great Blue Heron.— Single birds could be seen almost daily flying over the lake to a rookery on the Pere-Marquette River. Toward evening it was a common sight to see them fishing along the marshy shores.
 - 15. Fulica americana. Соот.— Rather common late in September.
- 16. Pisobia minutilla. Least Sandpiper.—Common, in small flocks along the shore of Lake Michigan during September.
- 17. Calidris leucophæa. Sanderling.— Large flocks were seen near Lake Michigan in September.
- 18. Totanus melanoleucus. Greater Yellow-legs.— A single bird was seen flying over Upper Hamlin on Aug. 17.
- 19. Totanus flavipes. Yellow-legs.—Common about Nordhouse Lake during the latter part of August and early September.
- 20. **Helodromas solitarius.** Solitary Sandpiper.—Common about the lakes after Sept. 9.
- 21. Actitis macularia. Spotted Sandpiper.— This species bred abundantly around Upper Hamlin. Young birds were seen on June 27.
- 22. Charadrius dominicus. Golden Plover.— A dead specimen was picked up on the shore of Silver Lake on Sept. 23.
- 23. Oxyechus vociferus. KILLDEER PLOVER.— Rather common. Flocks were seen frequently during September.
- 24. Ægialitis semipalmata. Semipalmated Plover.— Large flocks were seen at Silver Lake on Sept. 23.
- 25. Colinus virginianus. Bob-white.—Common in the farming regions, and about open hills. Young were observed on June 28.
- 26. Bonasa umbellus. Ruffed Grouse.—This species was most common in the dense coniferous woods, and along the heavily wooded creeks. A female with young was seen on June 30.
- 27. Zenaida macroura carolinensis. MOURNING DOVE.— Not common, only a few pairs breeding in the open woods.
- 28. Cathartes aura septentrionalis. Turkey Vulture.— A pair was seen soaring over Hamlin Lake on July 16. Although regularly seen further south, I am told that this species is seldom observed at this latitude.
- 29. Circus hudsonius. Marsh Hawk.— Individuals were occasionally observed.
- 30. Accipiter velox. Sharp-shinned Hawk.— Not common. Occasionally seen about the "bayous".
- 31. Buteo borealis. Red-tailed Hawk.— A pair of these birds was seen on Sept. 16.

- 32. Haliæetus leucocephalus. Bald Eagle.— Only one pair was seen about the lakes. Dr. Alfred Lewy of Chicago found an eagle's nest several years ago in the woods on the sand hills. It was placed about sixty feet from the ground in an oak, and on July 1 contained two large young.
- 33. Falco sparverius. Sparrow Hawk.— Fairly common on the wooded ridges.
- 34. Otus asio. Screech Owl.—On the chilly evenings and early dawns of September, the quavering call of this owl was heard frequently.
 - 35. Coccyzus americanus. Yellow-billed Cuckoo. Fairly common.
- 36. **Ceryle alcyon**. Kingfisher.— Every suitable bank around the lakes was in possession of a pair of these noisy birds. Young birds were out in the last week in June.
- 37. **Dryobates villosus.** Harry Woodpecker.— Common in the dense woods. In September they became quite abundant, and seemed to prefer the open or burnt-over woods.
- 38. Dryobates pubescens medianus. Downy Woodpecker. Common, especially during September.
- 39. Sphyrapicus varius. Yellow-bellied Sapsucker.— A pair seen on July 12 on a burned over hillside was probably breeding, although I failed to locate the nest. Migrating birds were seen during the latter half of September.
- 40. **Melanerpes erythrocephalus**. Red-headed Woodpecker.— A few pairs were observed about the farms and clearings.
- 41. Colaptes auratus luteus. FLICKER.— Very common, nesting around clearings and in stumps in open fields. Nests contained young early in July. The farmers complained that the "Yellowhammers" did a great deal of damage to their corn crops.
- 42. Antrostomus vociferus. Whip-poor-will.—At dusk and early dawn these noisy fellows kept up a great racket around the edge of Upper Hamlin. Birds were occasionally flushed during the daytime in the hardwood forests.
- 43. Chordeiles virginianus. Nighthawk.— Abundant over the lake and woods in the late afternoon and evening. On July 2, while crossing a burned-over ridge, I flushed a Nighthawk from a set of incubated eggs which were placed on the bare ground near a partly burned log. Migration in large flocks occurred between August 23 and Sept. 9.
- 44. Chætura pelagica. Chimney Swift.— Very abundant in the towns but only a few pairs were observed about Upper Hamlin. A nest containing five eggs far advanced in incubation was discovered on July 11, on a wall in a stable of an unoccupied lumber camp in the midst of the woods.
- 45. Archilochus colubris. Ruby-throated Hummingbird.—Fairly common in the few suitable localities.
- 46. **Tyrannus tyrannus**. Kingbird.— This species might be considered almost aquatic in its nesting habits, as the nests were invariably placed in stumps projecting out of the water, often at a considerable distance from the shore. Nests with eggs—always three in number—were seen up to the middle of July.

- 47. Myiarchus crinitus. Crested Flycatcher.— A few pairs occupied the open portions of the woods. Young birds were out by July 19.
 - 48. Sayornis phœbe. Phœbe.— Common about the farms.
- 49. Nuttallornis borealis. OLIVE-SIDED FLYCATCHER.— If classification were based on temperament, this species should be of the genus *Tyrannus*. Perched on the dead top of a hemlock, the male successfully guarded the vicinity of his nest in true Kingbird fashion, and his loud whip-wheuwheu-u-u could be heard for a long distance. Several pairs were seen, invariably on wooded hillsides.
- 50. Myiochanes virens. Wood Pewee.—The most abundant bird of the hardwood timber. Young were flying by July 25.
- 51. Empidonax flaviventris. Yellow-bellied Flycatcher.— One, probably migrating, was seen on August 25.
- 52. Empidonax minimus. Least Flycatcher.— Common, especially in the maple woods around the edge of Upper Hamlin. A nest was found on July 29 which contained two incubated eggs. This was placed in a semi-pensile position in a small fork in the outer branches of a maple, and would have passed for a nest of the Red-eyed Vireo.
- 53. Cyanocitta cristata. Blue Jay.— Only occasionally seen during the summer, but became common in small flocks during the latter part of August.
- 54. Corvus brachyrhynchos. Crow.— Common around the lake and about the sandhills.
- 55. Dolichonyx oryzivorous. Bobolink.— Fairly common in the farming regions.
- 56. **Molothrus ater**. Cowbird.— Not very commonly seen, although a number of eggs, usually in the nests of the Red-eyed Vireo, were found.
- 57. Agelaius phœniceus. Red-winged Blackbird.— Common in the "bayous" and other marshy places.
- 58. Sturnella magna. Meadowlark.— A common bird about the farms.
- 59. Icterus galbula. Baltimore Oriole.— Not common around the lake. Young birds just out of their nest were seen on July 28.
- 60. Euphagus carolinus. Rusty Blackbird.— A small flock of migrating birds was seen on Sept. 24.
- 61. Quiscalus quiscula æneus. Bronzed Grackle.— A few pairs were breeding in the hemlocks around the edge of Upper Hamlin.
 - 62. Astragalinus tristis. Goldfinch.— Abundant.
- 63. Plectrophenax nivalis. Snow Bunting.— A single bird was seen feeding along the shore of Nordhouse Lake on Sept. 25.
- 64. Poweetes gramineus. Vesper Sparrow.—Common, especially about cultivated fields and clearings. A nest containing young was seen on July 3. In the latter part of September large flocks were noted daily.
- 65. Zonotrichia albicollis. White-throated Sparrow.— A singing bird observed on July 14 was probably breeding although I could not discover the nest. Migrants became common in the latter part of September.

- 66. Spizella passerina. Chipping Sparrow.— Abundant everywhere. Young in the nests were seen on Sept. 27, and fresh eggs as late as July 14. A nest was found on a horizontal branch of an oak far out in the woods, but the usual nesting site was about the clearings. Large flocks of migrants passed through during the first two weeks of September.
 - 67. Spizella pusilla. FIELD SPARROW. Not common.
- 68. Junco hyemalis. SLATE-COLORED JUNCO.—Only one pair was observed during the summer. Migrating birds became common the last week of September.
- 69. Melospiza melodia. Song Sparrow.— Abundant. A nest with young was seen on June 25.
- 70. Melospiza georgiana. Swamp Sparrow.— Rather common on the edges of the "bayous."
- 71. Passerella iliaca. Fox Sparrow.— The only Fox Sparrow seen was one which alighted on the steamer at the middle of Lake Michigan on Sept. 27. Other land birds seen at mid-lake were Flickers, a Palm Warbler, and several Golden-crowned Kinglets, the latter of which allowed me to pick them up without any fear.
- 72. Pipilo erythrophthalmus. Towhee.— Very abundant about the edge of the woods and in the brushy clearings. A nest found was on the ground near a road, and contained young early in July. Large flocks of migrating birds, largely immature, were seen during September.
- 73. Zamelodia ludoviciana. Rose-breasted Grosbeak.— Fairly common on the wooded sides.
 - 74. Passerina cyanea. Indigo Bunting.— Only a few pairs were seen.
- 75. Piranga erythromelas. SCARLET TANAGER.—The song of the Tanager could almost always be heard in the beech forests. A nest in the outer branches of a hemlock contained newly hatched young on June 21.
- 76. Progne subis. Purple Martin.— Abundant in town, but not seen about the lakes.
- 77. Petrochelidon lunifrons. CLIFF Swallow.— This species was seen migrating with other swallows during a heavy gale on August 31.
- 78. **Hirundo erythrogastra**. Barn Swallow.— Only occasionally seen about Upper Hamlin. Nests in boathouses were still occupied on July 31.
- 79. Iridoprocne bicolor. Tree Swallow.—Large colonies of these swallows nested in cavities of dead stumps which projected out of the lake. Nests contained young on June 26.
- 80. Riparia riparia. Bank Swallow.— Common, especially during the evening when large flocks darted over the water. Nests of a small colony in the sandbank contained large young July 5.
- 81. Bombycilla cedrorum. Cedar Waxwing.— Very common everywhere, especially on the hill-sides. Large flocks were common after the last of August.
- 82. Vireosylva olivacea. Red-eyed Vireo.—This was the most abundant songster of the woods. Several nests were found, all in the lower

branches of oaks on the hill-sides about the lake. Fresh eggs were seen on June 22, and young were in their nests as late as the middle of July. Small migrating flocks passed through about Sept. 1.

- 83. Mniotilta varia. Black and White Warbler.—Fairly common in the heavy timber. Young were seen on July 16. During the last week of August flocks of migrants became very common, and a few stragglers were seen as late as Sept. 20.
 - 84. Dendroica æstiva. Yellow Warbler. -- Only occasionally seen.
- 85. Dendroica cærulescens. Black-throated Blue Warbler.—Not seen during the summer. Small migrating flocks were seen from August 26 to Sept. 17.
- 86. Dendroica coronata. Myrtle Warbler.—Migrants were first seen on Sept. 24.
- 87. Dendroica magnolia. Magnolia Warbler.— A rather uncommon migrant during the last week of August.
- 88. Dendroica pensylvanica. Chestnut-sided Warbler.—Common about the open woods and bushy hill-sides. Young were out on July 19. During the last week of August large migrating flocks were seen.
- 89. **Dendroica castanea.** Bay-breasted Warbler.— A specimen was taken on August 28.
- 90. Dendroica striata. Black-poll Warbler.—An abundant migrant from August 29 to the middle of September.
- 91. Dendroica blackburniæ. Blackburnian Warbler.— A fairly common migrant during the latter part of August.
- 92. Dendroica virens. BLACK-THROATED GREEN WARBLER.— The beautiful song of this warbler could be heard at all times in the pine woods. It was not only the most common member of its family during the summer, but was also the most abundant in the migration, which occurred throughout the month of September.
- 93. **Dendroica vigorsi.** PINE WARBLER.— This well-named bird was rather common among the scattered pines on the hill-sides. On July 12, I discovered a nest in the top of a Norway pine, containing four young which left it a few days later. A migrating flock was seen on Sept. 11.
- 94. Dendroica palmarum. Palm Warbler.— The first migrants were seen on Sept. 11, after which large flocks were seen daily.
- 95. Seiurus aurocapillus. Ovenbird.— Very common, nesting on the road sides. Last seen on Sept. 11.
- 96. Seiurus noveboracensis notabilis. Grinnell's Water Thrush.—Probably a summer resident. A migrant taken on August 29, was determined to be of this subspecies.
- 97. Oporornis agilis. Connecticut Warbler.— Fairly common migrant, specimens being secured August 30 and Sept. 14.
- 98. Oporornis philadelphia. Mourning Warbler.— A migrating bird was taken on August 24.
- 99. Geothlypis trichas. Maryland Yellow-throat.— Found in the low marshy woods and thickets.

- 100. Wilsonia pusilla. Wilson's Warbler.— Small migrating flocks were seen on August 30.
- 101. Wilsonia canadensis. Canadian Warbler.— This species was rather common in the small ravines where under-brush, ferns, and rotting logs made the way almost impassable. On July 11, I saw a male carrying food to its young, but was unable to discover the nest. Migrants were seen up to Sept. 17.
- 102. Setophaga ruticilla. Redstart.—Common, especially around the shore of Upper Hamlin. A nest which the young had just left was seen on July, and another containing four newly hatched young was discovered on July 31. A common migrant in small flocks between August 29, and Sept. 18.

103. Anthus rubescens. Pipit.— A specimen was taken Sept. 17, on the shore of Nordhouse Lake.

- 104. **Dumetella carolinensis.** Cateird.—Common in the shrubbery about the clearings. A nest containing fresh eggs was found on July 27, and another with young on July 16.
- 105. **Toxostoma rufum.** Brown Thrasher.— Not very common. A nest containing three eggs was found on the ground in a hay field on July 2.
- 106. Troglodytes aëdon. House Wren.—This species nested abundantly, not only about the farms and cottages, but also in dead stumps in the marshes and far out in the woods. Young in the nest were seen as early as June 27, and fresh eggs as late as July 16.
- 107. Nannus hiemalis. Winter Wren.—Several pairs were seen in the densest part of the woods, and usually near a stream.
- 108. Telmatodytes palustris. Long-billed Marsh Wren.— Apparently not common, even in suitable localities.
- 109. Certhia familiaris americana. Brown Creeper.— Migrants arrived on Sept. 18.
- 110. Sitta carolinensis. White-breasted Nuthatch.—Common in the open woods during the summer, and becoming abundant in late August and September.
- 111. Sitta canadensis. Red-breasted Nuthatch.— A common migrant after Sept. 18.
- 112. **Penthestes atricapillus.** Chickadee.— Very common, especially during September.
- 113. Regulus satrapa. Golden-crowned Kinglet.—Migrating birds were seen on Sept. 23.
- 114. Regulus calendula. Ruby-crowned Kinglet.— A common migrant after Sept. 18.
- 115. Hylocichla mustelina. Wood Thrush.— Occasionally heard singing on summer evenings. Migrants were seen up to Sept. 18.
- 116. Hylocichla ustulata swainsoni. OLIVE-BACKED THRUSH.— A very common migrant after Sept. 14.
 - 117. Hylocichla guttata pallasi. HERMIT THRUSH.— On the hottest

afternoons of August, as well as at all other times, the song of the Hermit could be heard from his perch in the dead top of a tall beach or hemlock. Migrants were seen up to the time I left.

118. Planesticus migratorius. ROBIN.—Abundant during the summer, and migrating in large flocks in the latter half of September.

119. Sialia sialis. Bluebird.—Rather common in the burned over areas, where dead stumps give suitable breeding places. Large flocks were seen during September.

NOTES ON THE BIRDS OF PIMA COUNTY, ARIZONA.

BY STEPHEN SARGENT VISHER.

In 'The Auk' for 1886–88, Mr. W. E. D. Scott published an account of the birds of Pinal, Pima, and Gila counties of south central Arizona. The list in the introduction to Bailey's 'Handbook of Birds of Western United States' is an abstract of Scott's. It mentions about 230 species as occurring in Pima County.

Mr. Herbert Brown, of Tucson, so frequently quoted by Scott, has, since 1888, published in 'The Auk' accounts of the occurrence of (1) Purple Gallinule ('88), (2) Scarlet Ibis ('99), (3) Waterturkey and Tree-duck (1906).

During the past dozen years Mr. Richard D. Lusk of Tucson has done much work, especially with the nesting birds of the mountains. The many records which he has been kind enough to permit me to announce are all based on the capture of specimens.

In August, 1907, and during the months March to September, 1909, I studied the valley in which Tucson lies, intensively, and, in 1909, the Santa Catalina mountain range extensively.

It is not impossible that the lapse of a quarter of a century has changed somewhat the avifauna of this changing region. At any rate a number of species (thirty) may be added to Scott's and Herbert Brown's lists; and the relative abundance, etc., of certain forms may with advantage be restated. However, the announcement of the occurrence of the several additional varieties is not so much the purpose of this article as the desire to add a mite to the